JOINT INFORMATION ENGINEERING ORGANIZATION

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SYMBOLOGY STANDARDS MANAGEMENT COMMITTEE DIRECTIVE

SSMC NO: 1-01	Date: March 7, 2001		
CP No: MIL99-01C	Title: Add Unknown Environment		
Originator, Name and Address: NAVY-NCTSI			
SSMC Action: Approved Approved with Changes Withdrawn Deferred Declared Substantive By: Disapproved Testing Required Prior to Decision Subsequent to Decision Allied Coordination Required	Decision: Approved with following changes to proposed graphics: place "U" on outside upper right of symbol frame and place the "?" and/or "F", "N", "H" in the center of the frame. Add "Unknown" battle dimension ID code "Z" to Tables A-I and D-I.		
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SYMBOLOGY CONFIGURATION MANAGEMENT CHANGE PROPOSAL FORM				
CHANGE PROPOSAL NUMBER		MIL99-01C		
ORIGINATOR	SPONSOR	DATE RECEIVED	DATE OF ACTION	
NCTSI	NAVY	May 11, 2000	March 7, 2001	
CHANGE PROPOSAL TITLE				
Add UNKNOWN Environment				
SUGGESTED CHANGE				

1. Statement of the Problem.

Table I of MIL-STD-2525B does not match allowable entries of MIL-STD-6016, VMF TIDP-TE, MIL-STD-6040, OS-OTG and meet Joint Electronic Order of Battle (EOB) requirements.

- 2. Problem Analysis.
 - a. Technical Requirement. Recently a study of several common fields used in USMTF, VMF TIDP-TE, TADIL J, OS-OTG and MIL-STD-2525B was conducted. One of the data fields reviewed was the MIL-STD-2525B Table I, Frame Shapes Depicting Affiliations and Battle Dimensions and data items forming the associated icons. Attachment (A) provides a tabular depiction of how this field correlated into other tactical communications standards. VMF TIDP-TE, MIL-STD-6016, MIL-STD-6040 and OS-OTG all allow data item "UNKNOWN" for any affiliation being identified.
 - b. Operational Requirement. The Joint Electronic Intelligence (ELINT) community and operational users require the ability to display "UNKNOWN" Battle Dimensions (Environment Category) for any Affiliation (Threat Identification).
 - (1) The following are operational examples where the "UNKNOWN" Battle Dimension identification is required:
 - Front Door Fire Control Radar found on both Echo Class Submarines and Kiev Class Cruisers.
 - Fan Song SA-2 Radar found on Kirov Class Destroyers and on Land Launchers.
 - Don 2 & Don K Radars found on various surface (merchant, fishing and naval vessels), subsurface platforms and port facilities.
 - SPS-64 Radar found on various surface and subsurface platforms.
 - LN-66 Radar found on multiple surface and subsurface platforms.
 - (2) ELINT/Communications Intelligence (COMINT) collectors may be unable to discern battle dimension from the content of the message/signal intercepted. However, the EOB provides affiliation based on ELINT parameters. The affiliation (or threat) should not be denied to the operator if available via message traffic or signal exploitation.
- 3. Incorporation Date. 1 January 2001

- 4. Implementation Date. 1 January 2002
- 5. Attachments.
 - A. OS-OTG Force Code, USMTF Force Threat Designator, VMF Environment/Category, VMF & Identity, VMF and TADIL J Environment/Category & Identity Correlation Table
 - B. Table I, Proposed Frame Shapes Depicting Affiliations and Battle Dimensions

JIEO ANALYSIS

OVERVIEW:

- 1. This Change Proposal creates additional symbol types for those tracks having a known affiliation but an unknown battle dimension (KNOWN/UNKNOWN), with their affiliation most likely identified through electronic tracking of the entity's signals. These new symbols are variants to the already existing UNKNOWN/UNKNOWN quatrefoil, and include symbol modifiers in field 'E' for neutral (N), hostile (H), and friendly (F) tracks. If the symbol's affiliation is uncertain, a question mark (?) is centered in the quatrefoil, resulting in a suspect symbol when it has an "H" in field 'E', and an assumed friend symbol when it contains an "F". The fill for the frame is the same color as for other friend (Cyan), neutral (Green), and hostile (Red) symbols.
- 2. The following changes must be made to the standard to incorporate the proposed changes:
 - a. Revise Table I, Frame Shapes Depicting Affiliations and Battle Dimensions, to include each new symbol variant shown in Attachment (B).
 - b. Revise Table A-X, Warrior icon set Unknown, to include symbols for each variant and their unique symbol identification codes. Symbol Identifications would be:
 - FRIEND/UNKNOWN = SFZP-----
 - NEUTRAL/UNKNOWN = SNZP -----
 - HOSTILE/UNKNOWN = SHZP -----
 - ASSUMED FRIEND/UNKNOWN = SAZP -----
 - SUSPECT/UNKNOWN = SSZP -----
 - c. Add text description to paragraph 5.3.1.1 after "...and a diamond frame to denote hostile affiliation." It will read: "The letter 'F' in field E of an "UNKNOWN" frame identifies the symbol as friendly, and 'N' as NEUTRAL, and an 'H' as HOSTILE. When combined with a question mark '?' centered in the unknown frame, an 'F' indicates ASSUMED FRIEND, and an 'H' indicates a SUSPECT track."

POTENTIAL CONFLICTS WITH EXISTING SYMBOLOGY:

These known affiliation/unknown battle dimension symbols do not conflict with any existing symbols within MIL-STD-2525B.

CONFORMANCE TO SYMBOL GUIDELINES:

The proposed are a modification of the rules concerning the composition, construction, and display previously set forth in the standard. Prior to this, the quatrefoil was only used to depict tracks with an unknown affiliation.

ADEQUACY AND IMPACT ON OTHER PROGRAMS:

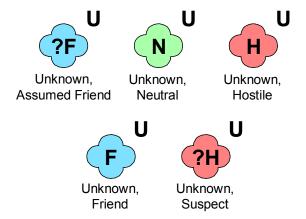
None known.

C/S/A COMMENTS

Navy Comments: The proposed symbols are consistent with rules concerning composition, construction, and display set forth in the standard.

DECISION NOTICE

Approved with the following changes to proposed graphics: place "U" on outside upper right of symbol frame and place the "?" and/or "F", "N", "H" in the center of the frame (see graphic for examples).



Add text description to paragraph 5.3.1.1 after "...and a diamond frame to denote hostile affiliation." It will read: "The letter 'F' centered in the 'unknown' frame identifies the symbol as Friendly, 'N' as Neutral, and 'H' as Hostile. When a question mark '?' precedes the 'F' in the frame, it indicates Assumed Friend. A question mark '?' that precedes the 'H' indicates Suspect."

Add "Z - Unknown" in the Battle Dimension (position 3) category in Tables A-I (p.48) and D-I (p.482).